

Notice of Allowability

Application No.

10/625,231

Examiner

Richard A. Rosenberger

Applicant(s)

CHILESE ET AL.

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

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1. The following is an examiner's statement of reasons for allowance:
2. The art does not show or suggest the combination claimed; in particular the art does not show or suggest the at least one fan positioned within the claimed enclosure, said fan causing a portion of a gas contained within said enclosure to circulate in laminar flow following a path substantially along interior wall surfaces of said enclosure, whereby said flowing gas makes thermal contact with a claimed heat exchanger, wherein there is a heat pump in thermal contact with the heat exchanger, with an optical cavity of a cavity enhanced optical spectroscopy system being within the housing but not being situated within said flow path.
3. Hancock et al (US 2004/0211905) briefly mentions, that in a cavity enhanced absorption apparatus that temperature control of the optical cavity may be required (page 2, paragraph [0034], lines 7-9 of that paragraph). Owen et al (US 6,486,474) teaches temperature control of a sample cell (column 10, lines 35-45). Holen et al discloses that temperature in a housing may be "suitably maintained at a selected level by means of one or more conventional electric coil heaters, fans, temperature sensors, and a temperature control circuit in a manner well known to persons skilled in the art" (in the paragraph beginning on column 8, line 56). Bragg et al (US 4,749,276) shows a long path absorption cell with a heating jacket and mirror heaters which allows the cell to be operated at elevated temperatures (column 5, lines 27-30). Stalder et al (US 3,860,818) shows a system with heating elements to alleviate the effects of temperature change (see the paragraph beginning on column 16, lines 46), and teaches a temperature sensor (a thermistor).

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While the references above show the general knowledge in the art of the benefits of temperature control in optical absorption measuring instruments, none of the references disclose or suggest the claimed combination as discussed above. Although Holen et al (mentioned above), does broadly teach that any fans be mounted in such a way as to avoid directly circulating air across the optics (column 9, lines 11-17), that reference does not describe a system as claimed with fans directing laminar flow substantially along interior walls of an enclosure in the claimed combination with the other claimed elements.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger
21 September 2005



Richard A. Rosenberger
Primary Examiner